DOCUMENT RESUME

ED 367 647 SP 035 092

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TITLE Effects of Age on Perceptions of Teacher Influence.
PUB DATE Nov 93
NOTE 20p.; Paper presented at the Annual Meeting of the Mid-South Educational Research Association (22nd, New Orleans, LA, November 10-12, 1993).
PUB TYPE Speeches/Conference Papers (150) -- Reports - Research/Technical (143)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Administrator Attitudes; Administrators; *Age Differences; Attitude Measures; Comparative Analysis; Elementary School Teachers; Elementary Secondary Education; *Group Membership; Secondary School Teachers; Teacher Attitudes; *Teacher Characteristics; Teacher Educators; *Teacher Influence
IDENTIFIERS Preservice Teachers

ABSTRACT

The purpose of this study was to examine the extent to which age might be related to perceptions of teacher influence associated with student success. The study used a survey to examine differences between the perceptions of preservice teachers (N=349), inservice teachers (N=253), school administrators (N=123), and university professors (N=39) about which teaching characteristics are the most essential to student success in the classroom. The survey consisted of three sections: (1) 16 teacher characteristics to be rated; (2) an opportunity to select and rank order 3 important teacher characteristics; and (3) demographic information. Results suggested a significant interaction effect for both group and age variables. While age did not appear to be as strong an influence on the perceptions of preservice and inservice teachers, it seemed to influence the perceptions of administrators and professors. Five variables (foster positive self-esteem in students, possess self-confidence, present subject matter in an interesting way, teach students to think for themselves, and show enthusiasm when teaching) were found to be significantly related to the interaction. (Contains 23 references.) (LL)

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ED 367 647

Effects of Age on Perceptions of Teacher Influence

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A Paper Presented at the Twenty-Second Annual Conference of the
Mid-South Educational Research Conference
New Orleans, Louisiana
November 10-12, 1993

Running Head: Age Perceptions

SP035092

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Effects of Age on Perceptions of Teacher Influence

Abstract

The extent to which age may be related to perceptions of teacher influence associated with student success was examined, based on the responses of four groups: preservice teachers, inservice teachers, school administrators, and university professors. A total of 764 educators, representing the four groups, responded to the Perceptions of Teacher Influence instrument.

Results of the two-way, groups-by-age, multivariate analyses indicated a significant interaction effect ($p < .01$) and significant main effects ($p < .05$) for both group and age variables. Two significant ($p < .01$) canonical dimensions were found to be associated with the interaction. Examination of the univariate F-tests indicated that five variables (i.e., foster positive self-esteem in students, possess self-confidence, present subject matter in an interesting way, teach students to think for themselves, and show enthusiasm when teaching) were significantly related to the interaction.

Effects of Age on Perceptions of Teacher Influence

Introduction

During the past ten years there has been increasing interest in finding out how beliefs, perceptions, knowledge, and experiential background of preservice and inservice teachers, principals, and students affect the teaching learning process (Babad, Bernieri, & Rosenthal, 1991; Borko, 1989; Brookhart & Freeman, 1992; Fraser and Fisher, 1982; Leithwood & Montgomery, 1982; Reynolds, 1992; Shavelson & Stern, 1981). It is believed that beliefs, perceptions, knowledge, and experience are among the variables that compose the scripts used by various groups of educators to perform the roles they play in the educational process (Fenstermacher, 1980; Shavelson & Stern, 1981). However, no studies have been located in which the goal was to determine the extent to which various groups of educators may agree or differ in their perceptions of teacher characteristics associated with student learning. Further, the extent to which age may influence perceptions has been addressed. By understanding the role that age plays in the perceptions held by groups of educators about the teaching/learning process, ideas may be generated for improving the preparation of teachers, teaching practices, and the administrations of schools.

The purpose of this study was to determine whether differences exist between the perceptions of preservice teachers, inservice teachers, school administrators, and university professors about which teaching characteristics are the most essential to student success in the classroom. Two research questions were addressed:

(1) Will preservice teachers, inservice teachers, administrators, and professors, representating different age categories, differ in their perceptions of effective teaching characteristics associated with student success in elementary and secondary classrooms?

(2) Will there be an interaction between group perceptions and age categories?

Methodology

Sample

The sample consisted of 349 preservice teachers, 253 inservice teachers, 123 school administrators, and 39 university professors, making a total of 764 respondents. All respondents resided within the State of Mississippi.

The preservice teachers included in the sample were elementary (n = 213), secondary (n = 82), or special area (n = 54, i.e., music education, special education, history education, etc.) majors, representing three distinct levels of progress within the teacher education program: second-semester sophomores who had not been formally admitted to teacher education (n = 65), second-semester juniors who were in the midst of their methodology coursework (n = 107), and seniors who had completed eight weeks of student teaching (n = 177).

The inservice teachers (n = 92 elementary, n = 105 secondary, and n = 56 assistant teachers) included in the sample were employed by selected schools in two school districts. One of the school districts had a predominantly African-American student population (74% African American, 26% Caucasian), and the other had a predominantly Caucasian student population (90% Caucasian, 10% African-American). In the predominantly Caucasian school district, approximately 90% of the teachers are Caucasian and 10% are African-American; in the predominantly African-American school district, approximately 55% of the teachers are Caucasian and 45% are African-American.

The school administrators (n = 40 elementary principals, n = 35 secondary principals, and n = 48 superintendents) included in the sample are employed by school districts throughout the State of Mississippi. Using a table of random numbers, 200 superintendents and 200 elementary and secondary principals were randomly selected from the list compiled by the State Department of Education.

The university professors included in the sample teach undergraduate students seeking certification in elementary education, secondary education, or a special area such as English, history, math, science, art, music, foreign

language, or physical education. The professors are employed by the main campus and the satellite campus of a university in Mississippi.

Instrumentation

The Perceptions of Teacher Influence (PTI) was used to survey the sample. The PTI, which was developed by the authors, consists of three sections: (1) a list of 16 teacher characteristics, each of which is rated by the respondent (using a six-point, Likert-scale ranging from essential to not essential) to indicate his/her belief about the degree of its importance in producing student success in elementary and secondary classrooms; (2) an opportunity to select and rank order three teacher characteristics that the respondent believes are the most important, followed by a brief written description of the evidence that could be used (for each selected characteristic) to indicate that a teacher possesses the designated characteristic [also, space is provided on the instrument where the respondent may write additional charactertistics that he/she believes are important]; and (3) a request for demographic information related to group membership (e.g., preservice teacher, school administrator, etc.), age, and gender of respondent. The PTI may be administered in a group setting; approximately 12-15 minutes are required to respond to the PTI. Responses on the first section of the PTI (i.e., the section containing 16 descriptive characteristics of classroom teachers) should be analyzed by item rather than as a group of items. A copy of the PTI is appended.

The list of 16 teacher characteristics contained in the first section of the PTI was compiled after considering several sources of information: items suggested by classroom teachers and school administrators; items listed on personnel reference forms used by school districts; items listed on teacher evaluation forms, such as the Mississippi Teacher Assessment Instrument (MTAI); areas included in standards for undergraduate and graduate teacher education programs set by professional organizations, such as the National Council of Teachers of Mathematics (NCTM), the International Reading

Association, (IRA), the National Council for the Accreditation of Teacher Education (NCATE); and the findings of relevant research studies. The 16 items contained in the PTI and the specific references/sources of information supporting inclusion of each item are as follows:

1. know the subject matter throughly (McEwan & Bull, 1991; Reynolds, 1992; Stein, Baxter, & Leinhardt, 1990)
2. manage (discipline) students effectively (Glasser, 1990; Kagan, 1992; Reynolds, 1992)
3. motivate students (Harari & Covington, 1981; Reynolds, 1992; Stodolsky, Salk, & Glaessner, 1991)
4. appreciate cultural diversity among students (Cazden & Mehan, 1989; Grossman, 1992; Reynolds, 1992)
5. follow district/state curricular guides (Blase, 1990; Stodolsky, Salk, & Glaessner, 1991)
6. use appropriate written and spoken language (Pajares, 1992)
7. work cooperatively with school personnel (Blase, 1990; Leithwood & Montgomery, 1982)
8. complete assigned responsibilities on time (personnel reference forms; suggested by teachers and school administrators)
9. be willing to work beyond regular school hours (Blase, 1990)
10. foster positive self-esteem in students (suggested by teachers and school administrators)
11. have received good grades in college (personnel reference forms)
12. possess self-confidence (Brookhart & Freeman, 1992; Pajares, 1992; Reynolds, 1992)
13. match instruction to each student's abilities (Blase, 1990; Leithwood & Montgomery, 1982; McEwen & Bull, 1991; Reynolds, 1992; Stodolsky, Salk, & Glaessner, 1991)
14. present subject matter in an interesting way (Harari & Covington, 1981; McEwen & Bull, 1991; Stodolsky, Salk, & Glaessner, 1991)
15. teach students to think for themselves (Harari & Covington, 1981;

Leithwood & Montgomery, 1982)

16. show enthusiasm when teaching (Aubrecht, Hanna, & Hoyt, 1986; Harari & Covington, 1981; Reynolds, 1992)

The PTI was pilot tested using a sample of 49 classroom teachers and school administrators (36 females and 21 males), who responded to the instrument twice and made suggestions for improving it. Their suggestions were incorporated into the instrument.

Procedures

After designing and pilot testing the Perceptions of Teacher Influence (PTI) survey questionnaire, sets of questionnaires to be administered to each of the groups were assembled and two sets of directions for administering the questionnaire were written: (a) directions to be used when administering the PTI to preservice teachers; and (b) directions to be used when administering the PTI to inservice teachers. Also, a letter was composed to accompany the PTI instrument being mailed to university professors and to school administrators; the letter explained the purpose of the study and requested that the PTI be completed and returned in an enclosed, stamped and self-addressed envelope by a specific date (approximately two weeks after its receipt by the respondent).

Using a single university, the names and addresses of all professors who teach undergraduate students seeking certification in elementary education, secondary education, or a special area were compiled. The letter of explanation, the PTI instrument, and a return envelope was mailed to each of the professors.

A list of all the public school administrators employed in the State of Mississippi was obtained. Using a table of random numbers, 200 school administrators (100 principals and 100 superintendents) were randomly selected from the list. The letter of explanation, the PTI instrument, and the return envelope was mailed to each of the administrators.

The authors collected responses from preservice teachers and inservice teachers by meeting with them in groups and asking them to respond to the PTI.

The last 20 minutes of designated class sessions were used to obtain responses from preservice teachers who were enrolled in selected courses required for a bachelor's degree in education. After receiving permission from two school superintendents to administer the PTI to teachers employed in their school district, responses from inservice teachers were collected during the first 20 minutes of staff development workshops being held at the school sites.

All responses to the PTI were obtained during the month of March.

Results

Responses from a total of 739 respondents were included in the data analyses, after excluding instruments with missing information. For analysis purposes, the five age categories (20-30, 31-40, 41-50, 51-60, and over 60 years) listed on the PTI were collapsed into two categories (20-40 years and 41-60+ years). The .05 level of significance was used for all analyses.

Survey responses were analyzed using a two-way (groups-by-age) multivariate analysis of variance. As shown in Table 1, significant main effects were found for group ($p < .001$) and age ($p < .03$) and a significant group-by-age interaction ($p < .01$) was found. Two significant ($p < .01$) canonical dimensions associated with the interaction were found.

Examination of the structure coefficients indicated that on the first dimension, variables 10, 15, and 16 contributed to the significant interaction, with variable 16 making the strongest contribution. On the second dimension, variables 4, 6, 12, and 15 contributed to the interaction, with variable 12 being the strongest and the only variable positively related to the dimension.

Examination of the univariate *F*-tests for the group-by-age interaction indicated significant interactions for variables 10, 12, 14, 15, and 16. The univariate F ratios, raw and standardized coeffiecients, and structure coeffiencients are presented in table 2. The interactions for the significant variables are presented numerically and graphically in figures 1 - 5.

Discussion

Group-by-age interactions were found for five variables: item 10 (foster

positive self-esteem in students), item 12 (possess self-confidence), item 14 (present subject matter in an interesting way), item 15 (teach students to think for themselves), and item 16 (show enthusiasm when teaching). These variables, with the exception of variable 15, describe affective traits.

In general, the biggest age group differences were found for the administrators. Also, younger administrators rated these variables lower than the older administrators and lower than the other groups except on variable 10 which was rated the lowest by the younger professors. Two possible explanations are offered for this finding. First, it may be that the younger administrators, and possibly the younger professors, have not had much actual classroom teaching experience so they are less informed about the impact that affective variables have on the teaching/learning process; the fact that they are less than 40 years of age indicates that lack of classroom teaching experience may be a factor, considering that after receipt of the bachelor's degree another 5-6 years are required to complete both the master's and doctoral degrees. Second, it is possible that during the past 10-15 years, graduate programs in school administration have placed too much emphasis on nonaffective aspects of schooling; hence, the younger administrators are more concerned about meeting instructional objectives, delivery of academic content, and high test scores than about the affective component of the classroom.

Preservice teachers and inservice teachers tended to rate the variables at about the same level regardless of age, except for variable 16. Younger preservice teachers tended to rate the importance of showing enthusiasm higher than did the older preservice teachers.

Of the four groups, the professors were the most varied in their responses on the five variables. The older professors rated variable 10 (foster positive self-esteem in students) at a higher level than the younger professors. The younger professors rated variables 12, 14, and 15 (possess self-confidence, present subject matter in an interesting way, and teach students to think for themselves) at a higher level than the older professors.

These ratings may indicate that the younger professors focus on the teacher's delivery of content while the older professors focus on the teacher's ability to build student self-esteem. Until the mid-1980s there was an emphasis in teacher education on the teaching of subject matter; however, the older professors have been around long enough to realize that students are more receptive to learning when their self-esteem is strong. Only on variable 16 (show enthusiasm when teaching) did the older and younger professors display similar ratings. In general, the younger professors rated the variables (except for variable 10) at about the same level as the preservice and inservice teachers and the older administrators.

The results of this study suggest that perceptions of teacher influence are somewhat tied to group membership and to age. While age does not appear to be as strong an influence on the perceptions of preservice and inservice teachers, it seems influence the perceptions of administrators and professors.

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Table 1

Summary of MANOVA Analyses

Source	df	F	p
Group	48/2130	3.95	<.001
Age	16/716	1.75	<.03
Group X Age	48/2130	2.27	<.01

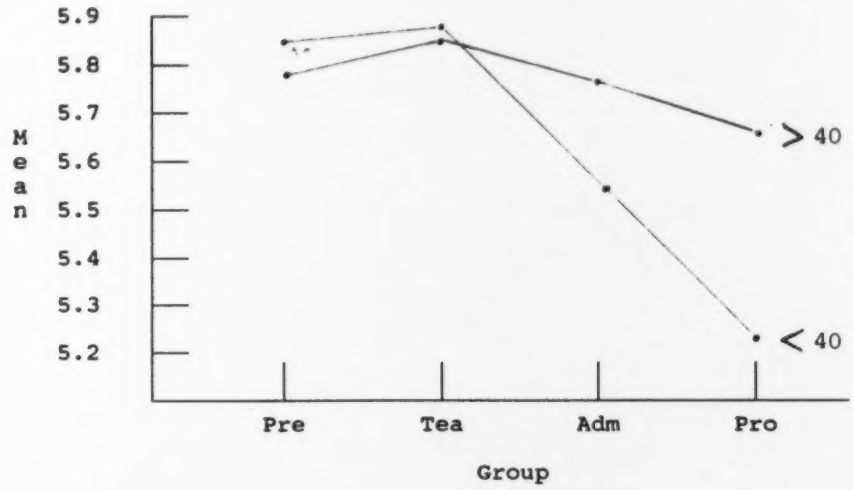
Table 2

Univariate *F*-ratios, Raw, Standardized, and Structure Coefficients for the Group-by-Age Interactions

			Coefficients					
			Raw		Standardized		Structure	
Variable	*F*	*p*	I	II	I	II	I	II
Item 1	1.80	.15	.69	-.06	.35	-.03	.27	.15
Item 2	1.56	.20	.55	-.28	.28	-.14	.20	-.23
Item 3	.58	.17	.50	-.40	.24	-.19	.04	-.15
Item 4	1.67	.51	.31	.66	.28	.56	.11	.30
Item 5	.77	.51	.18	.09	.18	.09	.13	.01
Item 6	1.67	.17	-.10	-.64	-.06	-.37	-.03	-.35
Item 7	.30	.83	-.04	-.27	-.03	-.20	.01	-.15
Item 8	.57	.63	-.14	.62	-.11	.47	-.09	.14
Item 9	1.97	.12	.33	-.02	.34	-.02	.13	-.07
Item 10	3.36	.02	-.68	1.09	-.31	.50	-.33	.29
Item 11	1.22	.30	-.29	-.11	-.31	-.12	-.20	-.16
Item 12	2.88	.04	.14	-.79	.09	-.52	-.09	-.44
Item 13	.40	.75	-.04	-.02	-.03	-.01	-.13	-.06
Item 14	2.86	.04	-.01	-.40	-.01	-.22	-.29	-.29
Item 15	5.67	.01	-.83	-.70	-.41	-.35	-.48	-.30
Item 16	7.36	.01	-1.49	.51	-.64	.22	-.59	-.08

Figure 1

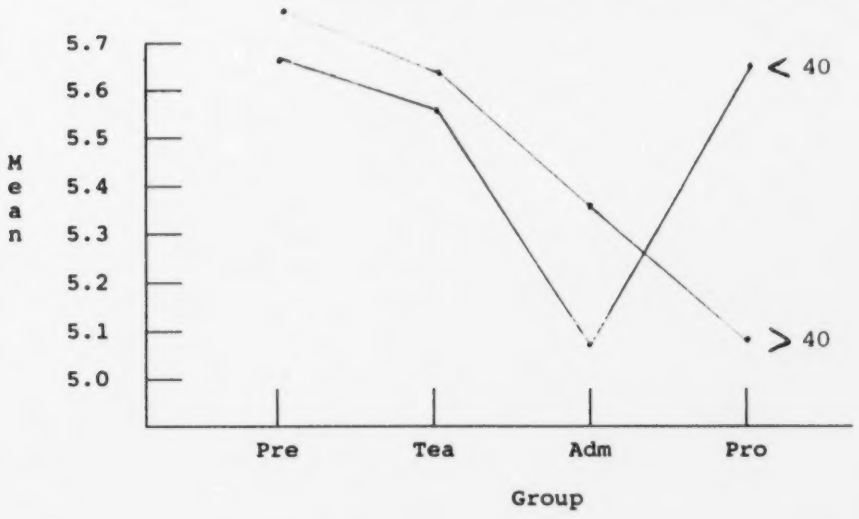
Variable 10: foster positive self-esteem in students



Cell Means -	Preservice	Teachers	Administrators	Professors
< 40 years:	5.85	5.86	5.53	5.22
> 40 years:	5.77	5.82	5.76	5.65

Figure 2

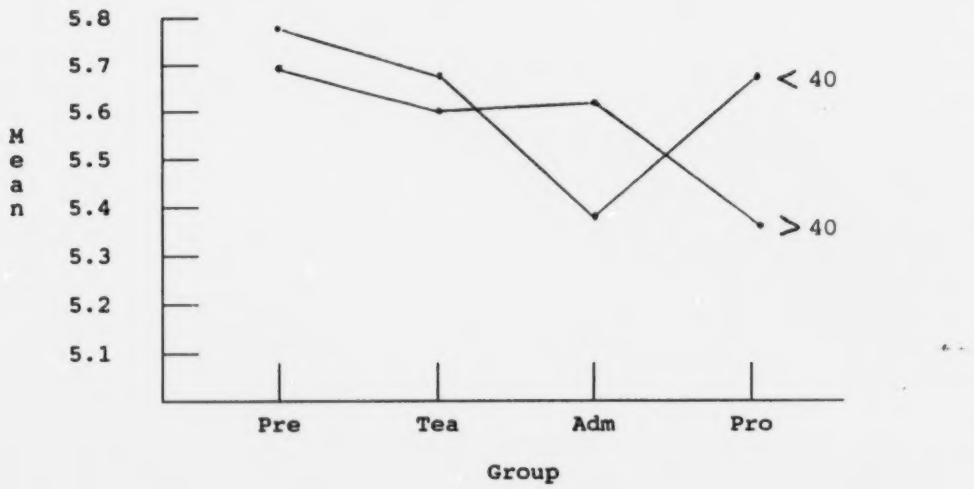
Variable 12: possess self-confidence



Cell Means -	Preservice	Teachers	Administrators	Professors
< 40 years:	5.68	5.56	5.06	5.67
> 40 years:	5.77	5.62	5.36	5.08

Figure 3

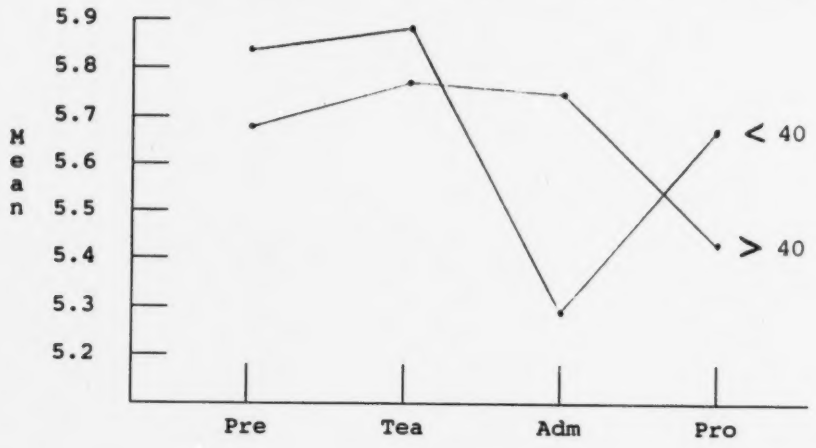
Variable 14: present subject matter in an interesting way



Cell Means -	Preservice	Teachers	Administrators	Professors
< 40 years:	5.78	5.67	5.29	5.67
> 40 years:	5.68	5.60	5.62	5.35

Figure 4

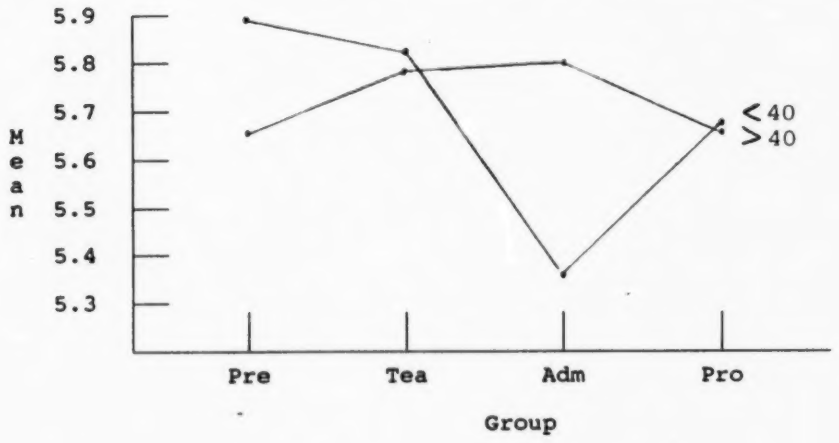
Variable 15: teach students to think for themselves



Cell Means -	Preservice	Teachers	Administrators	Professors
< 40 years:	5.82	5.87	5.29	5.67
> 40 years:	5.68	5.76	5.74	5.42

Figure 5

Variable 16: show enthusiasm when teaching



Cell Means -	Preservice	Teachers	Administrators	Professors
< 40 years:	5.88	5.82	5.35	5.67
> 40 years:	5.64	5.78	5.79	5.65